

REMARKS

Claims 1 to 14 are pending in the application.

Rejection under 35 U.S.C. 103

Claims 1-14 stand rejected under 35 U.S.C. 102(b) as being unpatentable over *Craig* (US 6,266,809) and *Heath* (US 6,360,366).

Examiner argues in regard to claims 1 and 8 that *Craig* discloses a method for performing an update in a program-controlled device wherein the steps of causing the device, initiated by the external Web browser, to request update information from the Web server for an update of the program of the program-controlled device; examiner refers to col. 6, lines 1-15, and cites "The initialization process of the networked computer ... ". It is respectfully submitted that *Craig* describes a network server/network computer environment - there is no program-controlled device positioned between the network computer and the server.

The examiner moreover states that *Craig* does not disclose:

- a) downloading from the Web server to the external Web browser wherein the requested update is being passed through the program-controlled device to the external Web browser;
- b) caching the requested update information by a program code executed in the external Web browser;
- c) programming the requested update information into the program-controlled device by the program code executed in the external Web browser.

The examiner further argues that *Heath* discloses

regarding a) downloading the requested update information from the Web server to the external Web browser (examiner refers to col. 5, lines 1-15; " ... only downloaded when there is a need...");

regarding a) the requested update information is being passed through the program-controlled device to the external Web browser (examiner refers to col. 8, lines 46-57; " ... such as Web browser, is configured not only to retrieve a component catalog file...")

regarding b) caching the requested update information by a program code executed in the external Web browser (col. 4, lines 65-67; "A persistent cache directory on

the client stores a representation of the catalog file...")

regarding c) programming the requested update information into the program-controlled device by the program code executed in the external Web browser (col. 8, lines 45-55; " ... to retrieve a launcher program").

According to the examiner, these steps are carried out in an analogous system for the purpose of providing an improved version updating process in the client-server environment in which such updating requires frequent and efficient deployment of the application components as set forth in col. 1, lines 44-47.

In examiner's opinion it would therefore have been obvious to download and cache the requested update information by the program code executed in the external Web browser. The modification in examiner's opinion would have been obvious because this would provide a simple way to connect various types of intelligent devices to allow for communication and sharing of resources while avoiding the interoperability and complex configuration problems existing in conventional networks, as cited in col. 2, lines 1-5.

The method of instant claim 1 for performing an update of a program in a program-controlled device is characterized by:

the program-controlled device (1) is connected to an **external Web browser** (5);

the program-controlled device (1) comprises **Web server functions for communicating with the external Web browser** (5);

the program-controlled device has a **network connector** for accessing a **Web server** (2);

initiated by the external Web browser (5), the program-controlled device requests update information for an update of a program of the program-controlled device (1) from the **Web server** (2);

the requested update information is **downloaded from the Web server** (2) **to the external Web browser** (5) and **passes through the program-controlled device** (1) to the external Web browser (5);

the requested update information is **cached by a program code executed in the external Web browser** (5); and

the requested **update information is programmed into the program-controlled device (1)** by the program code executed in the external Web browser (5).

The program-controlled device according to instant claim 8 comprises:

a **network connector** for providing a connection to a Web server (2);

an **interface** for providing a connection **with an external Web browser (5)**;

Web server functions enabling, upon request by the external Web browser (5) connected through the interface, **downloading of update information from the Web server (2)** connected through the network connector and transferring of the update information **to the connected external Web browser (5)**;

a stored **program code (6) executable in the connected external Web browser (5)**; and

at least one **program changeable** by the program code executable in the connected external Web browser **with the update information transferred to the external Web browser (5)**.

The claims 1 and 8 clearly set forth that the program-controlled device is an entity separate from the Web browser - the Web browser is external and is connected to the program-controlled device by an interface; the Web browser is not a component of the program-controlled device (claim 8 defines that the program-controlled device has Web server functions and an interface for connecting the device and the Web browser; claim 1 defines that the device is connected to an external Web browser and communicates by Web server functions on the program-controlled device with the Web browser). The specification and the drawings show that the program-controlled device 1 and the computer 4 where the Web browser is installed are separate devices (see paragraph 0035; Figure). The program-controlled device is connected to the external Web browser by an interface; the Web browser is not part of the program-controlled device; the program controlled device has Web server functions so as to be able to communicate with the external Web browser.

Neither *Craig* nor *Heath* set forth such a configuration. *Craig* discloses network computers (diskless computers without persistent storage - no programs reside on the

network computers) operating only within the network environment. *Heath* discloses a server-client environment as illustrated in general in Figs. 2A and 2B. Also note the detail view of Figs. 3C and 3D illustrating the communication between the server and the client 22 (shown in dashed lines and containing the launcher program - Fig. 3C). The gist of the design of *Heath* is that the client 22 controls the software upgrade (col. 2, lines 52-53: "... a client 22 controls the process of a software upgrade in the client ..."). The download of the software components for an upgrade requested by the client is stored in cache 22a that is a component of the client 22 (see col. 4, lines 66-67: "persistent cache directory 22a on the client 22"; col. 5, line 65: "persistent cache 22a of the client"; col. 6, lines 16-17: "a cache on the client"; col. 6, line 64: "in cache on the client" etc.). This means that the client comprises the Web browser and the cache and requests and downloads upgrades directly from the server. There is no program-controlled device between the client and the server having an interface to an external Web browser; there is no program-controlled device with Web server functions for communicate with an external Web browser.

In regard to claim 1 where it is defined that the requested update information is being passed through the program-controlled device to the external Web browser, the examiner makes reference to col. 8, lines 46-57; "... such a Web browser, is configured not only to retrieve a component catalog file...". This text portion only discloses that a Web browser retrieves a catalog file and a launcher program from a server for update procedures **on the client computer; the Web browser is on the client computer** (see line 51 of col. 8). A user employs the **Web browser on the client** to access the server and retrieve the catalog file and to also retrieve a launcher if not already present. This is the standard server/client configuration. There is no external Web browser and there is no intermediate program-controlled device:

- that has an interface with which it is connected to an external Web browser;
- that has Web server functions for communicating with the external Web browser;
- that has a network connector for connecting the program-controlled device to the Web server; and
- through which the update information is being passed from the server to the Web browser.

There is no disclosure in regard to methods steps, wherein

- the program-controlled device (1) is connected to an **external Web browser (5)**;
- the program-controlled device (1) comprises **Web server functions for communicating with the external Web browser (5)**;
- the program-controlled device has a **network connector** for accessing a **Web server (2)**;
- **initiated by the external Web browser (5)**, the program-controlled device requests update information for an update of a program of the program-controlled device (1) from the **Web server (2)**;
- the requested update information is **downloaded from the Web server (2) to the external Web browser (5) and passes through the program-controlled device (1)** to the external Web browser (5);
- the requested **update information is programmed into the program-controlled device (1)** by the program code executed in the external Web browser (5).

As explained in detail in paragraphs 0038 to 0041 of the instant specification, via the Web browser a command for an update is triggered and transferred to the program-controlled device which, in turn, contacts the Web server and requests an update. The update passes through the device to the Web browser where it is cached by Java applet. The Java applet is started within the Web browser and the update information is then programmed by Java applet into the device; these steps are shown in the Figure by arrows a) through e). It is apparent that the device is a "transfer station" between the Web browser and the Web server (arrows a) and b) to request an update; arrows c) and d) to download an update to the Web browser) before the update is installed in the last step e) in the device. Such a configuration is nowhere shown in the cited references; the client computer or network computer communicating with the server in both references is not a program-controlled device as defined in the instant claims as the program-controlled device is a separate entity with Web server functions, an interface for connecting to the external Web server, and a network connector for the server.

The invention, especially in connection with Java applets, provides an important innovation in connection with implemented Java security features commonly referred to as "Java Sandbox". Java applets, the most common program codes executable in a Web browser, are inter alia configured, as part of their high safety standards, to communicate within a Web browser environment exclusively with that server from which the Java applet

has been received so as to prevent, for example, access to the local hard disk or to the network. The aforementioned "Sandbox" prevents a Java applet from being stored in the memory correlated with the Web browser; the "sandbox" is also the reason that a direct transfer from Web server to Web browser is not possible for updating a program-controlled device because the applet then cannot communicate with the program-controlled device as the program-controlled device is not the server from which the applet has been downloaded.

However, it is desirable that the Java applet communicate with the program-controlled device for updating the software on the program-controlled device. Therefore, the present invention proposes to load the Java applet into an **external Web browser** by passing the Java applet through the program-controlled device so that the Java applet on the external Web browser is then able to communicate with the program-controlled device in a server/browser environment (program-controlled device acting as a server since it is provided with Web server functions). See instant specification, paragraphs [0025] to [0026], for more details.

In summarizing the above, the configuration of the present invention, i.e., having the program-controlled device whose software is to be updated connected as a relay station between the Web server and the Web browser and providing the program-controlled device with Web server functions so that the program-controlled device is able to communicate with the external Web browser is a novel and inventive concept that is not obvious in view of the cited references that show only a simple server/client environment. Applicant would like to stress again that there is no program-controlled device shown in either *Craig* or *Heath* as both references relate to direct server/client exchanges and not an external Web browser that communicates with a program-controlled device with Web server functions. The client of *Heath* - if considered as a "program-controlled device" - does not have an external Web browser with cache; the Web browser as well as the cache are integral parts of the client computer. The client of *Heath* has no Web server functions.

Claims 1 and 8, in particular dependent claims 2 and 10 claiming Java applets, are therefore not obvious in view of the cited references and are believed to be allowable together with their dependent claims.

Reconsideration and withdrawal of the rejection of the claims under 35 USC 103 are

respectfully requested.

CONCLUSION

In view of the foregoing, it is submitted that this application is now in condition for allowance and such allowance is respectfully solicited.

Should the Examiner have any further objections or suggestions, the undersigned would appreciate a phone call or **e-mail** from the examiner to discuss appropriate amendments to place the application into condition for allowance.

Recognizing that Internet communications are not secure, I hereby authorize the USPTO to communicate with me concerning any subject matter of this application by electronic mail. I understand that a copy of these communications will be made of record in the application file.

Authorization is herewith given to charge any fees or any shortages in any fees required during prosecution of this application and not paid by other means to Patent and Trademark Office deposit account 50-1199.

Respectfully submitted on December 10, 2007,

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